

Hardwood Slope Forest

Rarity Rank: Hardwood Slope Forest - S3S4/G4

Synonyms: Beech-Magnolia Forest, Mixed Hardwood Forest, Hammock, Mixed Mesic Hardwood Forest

Ecological Systems:

CES203.280 West Gulf Coastal Plain Mesic Hardwood Forest

CES203.378 West Gulf Coastal Plain Pine-Hardwood Forest

General Description:

- More or less evenly distributed in uplands statewide
- Occur on slopes (often steep) rising out of small stream floodplains
- Soils typically rich, mesic, silt loams, and silty clay loams with pH range from acidic to circumneutral
- Dominated by hardwood tree species, with generally sparse herbaceous layer
- *Pinus taeda* (loblolly pine) may be present but infrequent
- Fire occurred very rarely in hardwood slope forests, and insect and pathogen outbreaks are likely more important disturbance vectors in this community



Plant Community Associates

Common overstory tree species include:

Fagus grandifolia (beech),
Quercus alba (white oak),
Q. michauxii (swamp white oak),
Q. laurifolia (laurel oak),
Magnolia acuminata (cucumber tree),
M. pyramidata (pyramid magnolia, rarely),
Liquidambar styraciflua (sweetgum),
C. cordiformis (bitternut hickory),
Pinus taeda (loblolly pine – occasional),

Magnolia grandiflora (southern magnolia),
Q. shumardii (shumard oak),
Q. nigra (water oak),
Q. velutina (black oak),
M. macrophylla (big-leaf magnolia),
Liriodendron tulipifera (tulip tree),
Carya tomentosa (mockernut hickory),
C. glabra (pignut hickory),
Pinus glabra (spruce pine – FL Parishes)

Common midstory & understory species include:

Oxydendrum arboreum (sourwood),
Styrax grandifolia (bigleaf snowbell),
Symplocos tinctoria (sweetleaf),
Stewartia malacodendron (silky camelia),

Halesia diptera (silverbell),
Cornus florida (flowering dogwood),
Prunus caroliniana (cherry-laurel),
Ilex ambigua (holly),



Natural Communities of Louisiana



Common midstory & understory species continued:

Amelanchier arborea (downy service-berry),
Carpinus caroliniana (ironwood),
Vaccinium arboreum (winter huckleberry),
Erythrina herbacea (red coral bean)

Illicium floridanum (starbush-FL Parishes),
Ostrya virginiana (eastern hophornbeam),
V. elliotii (Elliott's blueberry),

Common herbaceous and fern species include:

Hexastylis arifolia (wild ginger, FL Parishes),
Polygonatum biflorum (smooth solomon's seal),
Tipularia discolor (crane-fly orchid),
Mitchella repens (partridge-berry),
Podophyllum peltatum (may-apple),
Polymnia uvedalia (bear-paw),
Lilium michauxii (Carolina lily),
Polystichum acrostichoides (Christmas fern),
Phegopteris hexagonoptera (broad beech-fern)

Trillium spp. (wake-robins),
Uvularia perfoliatum (bellwort),
Viola spp. (violets),
Spigelia marilandica (Indian pink),
Sanicula spp. (snakeroots),
Chamaelirium luteum (devil's-bit),
Arisaema spp. (jack-in-the-pulpits),
Asplenium platyneuron (ebony spleenwort),

Federally-listed plant & animal species:

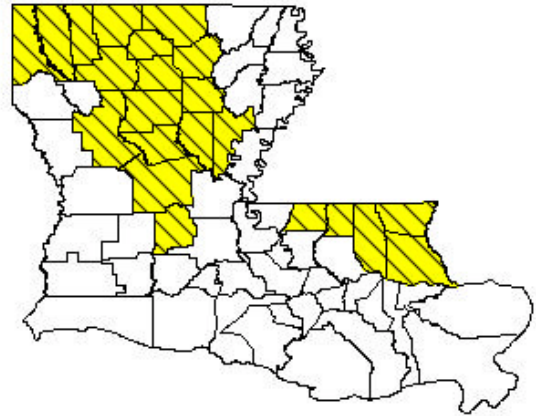
None

Range:

Occurs in portions of the East Gulf Coastal Plain, Upper West Gulf Coastal Plain, and Lower West Gulf Coastal Plain

Threats & Management Considerations:

The hardwood slope forest community is estimated to have occupied 100,000 to 500,000 acres historically and of that an estimated 25 to 50 % still remains. Habitat conversion to pine plantations or residential uses, invasive and exotic species, construction of roads, utilities and pipelines, and use of off-road vehicles all currently threaten long-term viability of these forests.



Use of appropriate management activities and developing a compatible management plan prevents destruction or degradation of this habitat type and promotes long-term maintenance of healthy hardwood slope forests. Such management strategies should include:

- Preventing conversion of existing natural forests to other land uses
- Maintain natural species composition by following appropriate hardwood management techniques
- No harvesting on steep slopes and during wet periods to prevent soil damage
- Surveying for and removal of any invasive plant species (exotics or woody) with use of spot herbicides or mechanical means
- Prohibiting off-road vehicle use or restricting use to existing trails